





### VetChange

Web Based Treatment Reduces Risky Alcohol Use and PTSD Symptoms in OEF/OIF Veterans\*

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\*Funded by NIAAA and National Center for PTSD

## Research Team

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# Post-deployment problems OEF/OIF Veterans

- Alcohol misuse
- High rates of PTSD
- Co-morbid drinking and PTSD
- Not reaching all Veterans who need care with traditional interventions

# Internet Interventions A Promising Approach

- Address primary barriers to care
- Growing evidence of effectiveness for problem drinking and PTSD
- Potential for reaching large number of returning Veterans

## Developing VetChange

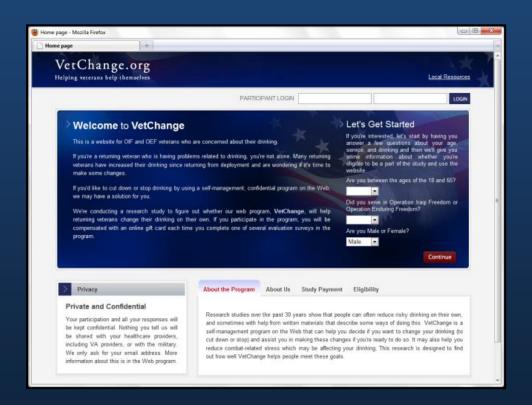
- Fully automated Web intervention
- Derived from evidence-based care
- Tailored to returning Veterans
- Integrated approach

## **Key Questions**

Will they come?

Will they stay?

Will they improve?



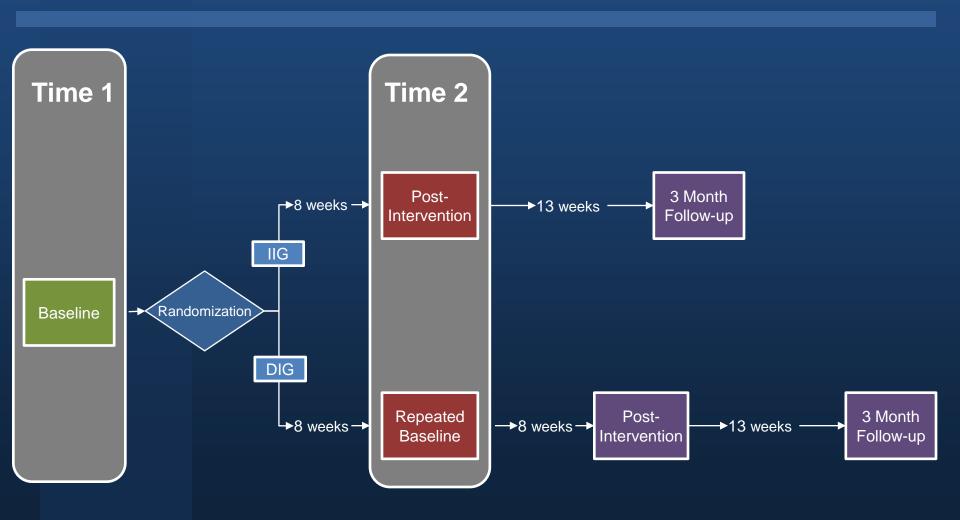
# RANDOMIZED CLINICAL TRIAL



## Study Design

- Two Groups
  - ➤ Initial Intervention Group (IIG)
  - Delayed Intervention Group (DIG)
- 2:1 Randomization favoring IIG
- Participants balanced on gender

## **Assessment Timeline**



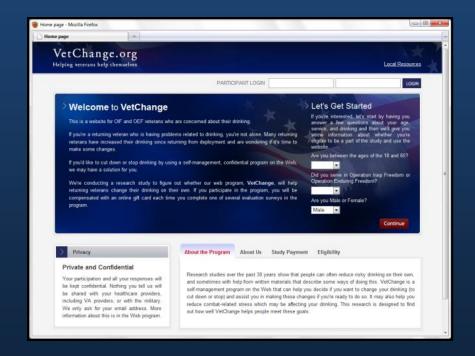
## **Target Population**

- Few restrictions on study entry
- OEF/OIF male and female veterans
- Ages 18–65
- Problem Drinkers or mild dependence
  - ➤ AUDIT scores 8–25 (M), 5–25 (W)
  - Drinking above NIAAA guidelines past 30 days
- Willing to provide email address

#### Assessment Measures

- Demographic/military questions
- AUDIT (Alcohol problem severity)
- QDS (Quantity/Frequency Drinking)\*
- SIP (Alcohol related problems)\*
- DRRI (combat exposure)
- PCL-5 (PTSD Symptom Checklist)\*

## VetChange INTERVENTION



#### Goals of Intervention

- Eight modules
  - Enhance motivation to change
  - > Improve coping skills to manage broad range of high risk drinking situations
  - Coping skills training to manage moods, stress, PTSD symptoms (anger/sleep)
  - > Build social support
- Flexible in addressing drinking goals

## VetChange RESULTS



## Will they Come?

#### Facebook Advertising

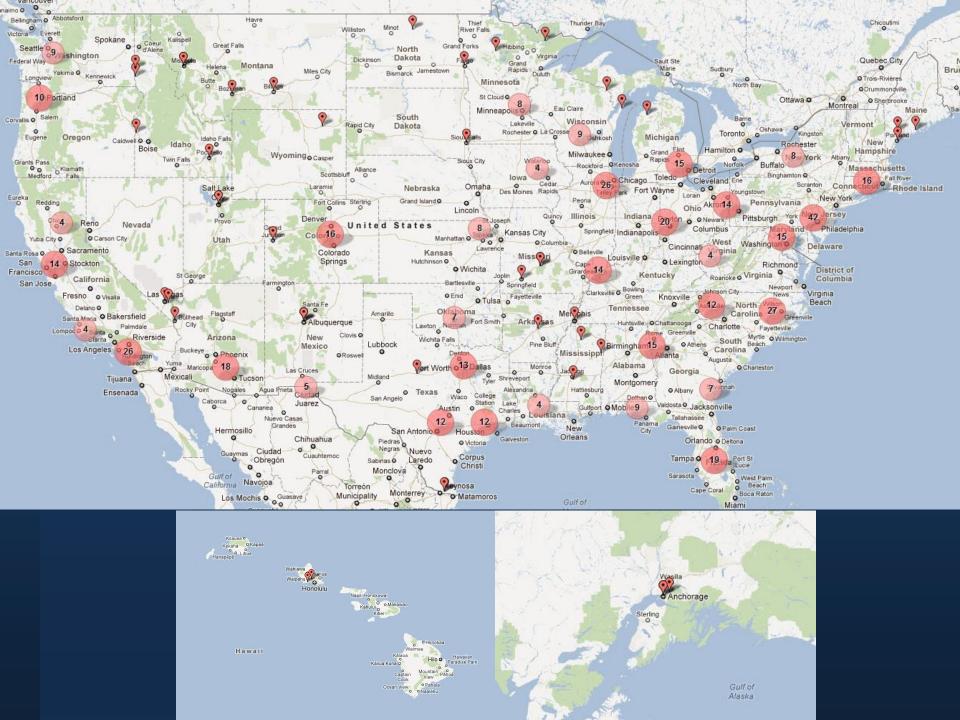


46 days of recruiting



600 randomized participants





## Participant Characteristics

#### 600 participants

404 IIG, 196 in DIG

#### Demographics

- Average age: 32.0 (7.7)
- 86.3% male; 13.7% female
- 79.3% Caucasian; 9.7% Latino; 4.3 % African-American

#### **Deployment**

- 181 Afghanistan, 501 Iraq
- Average number of tours: 2.3 (1.9)
- Average number of months deployed: 19.3 (14.8)
- 60% Army, 20% Marines

# Baseline Assessment Groups Combined

	Mean	SD
Measure		
AUDIT	17.7	4.7
Average Drinks per Drinking Day (DDD)	7.1	3.7
Average Drinks per Week (AWD)	27.5	18.3
Percent Heavy Drinking Days (HDD)	34.2	27.7
SIP (Alcohol-related problems)	17.4	8.1
DRRI Combat Exposure Scale (CES)	8.0	4.2
PCL-5	40.8	19.3

#### **Treatment Within Past Three Months**

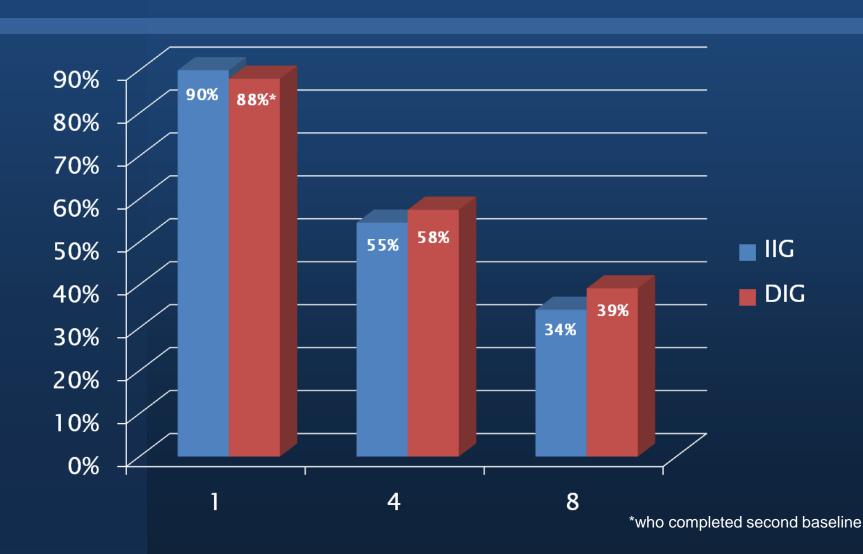
Treatment	%
ANY*	61.8
TYPE OF TREATMENT	
Mental Health (MH) Only	60.2
MH and Alcohol/Drug	33.1
Alcohol or Drug Only	6.7

<sup>\*78.2%</sup> of Veterans in treatment report this was for PTSD

**VetChange Results** 

## **WILL THEY STAY?**

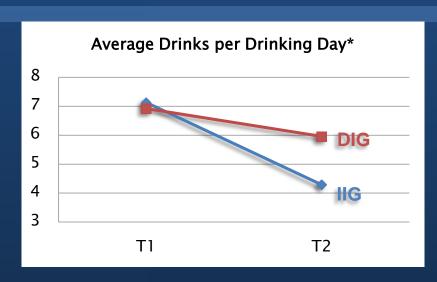
## **Module Completion Rates**

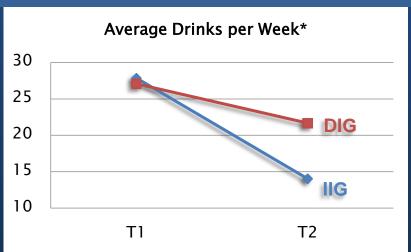


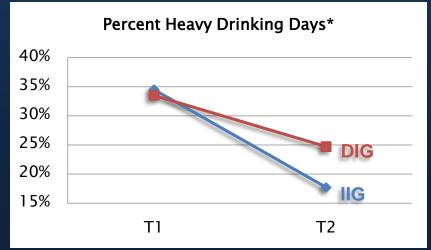
**VetChange Results** 

### WILL THEY IMPROVE?

## **Drinking Outcomes**

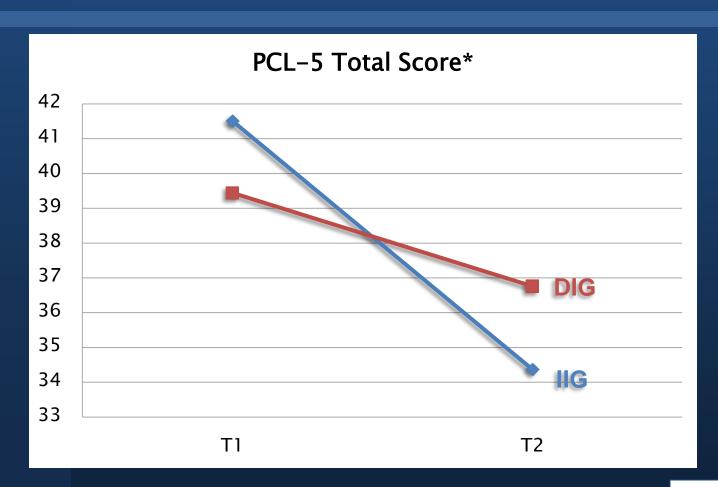




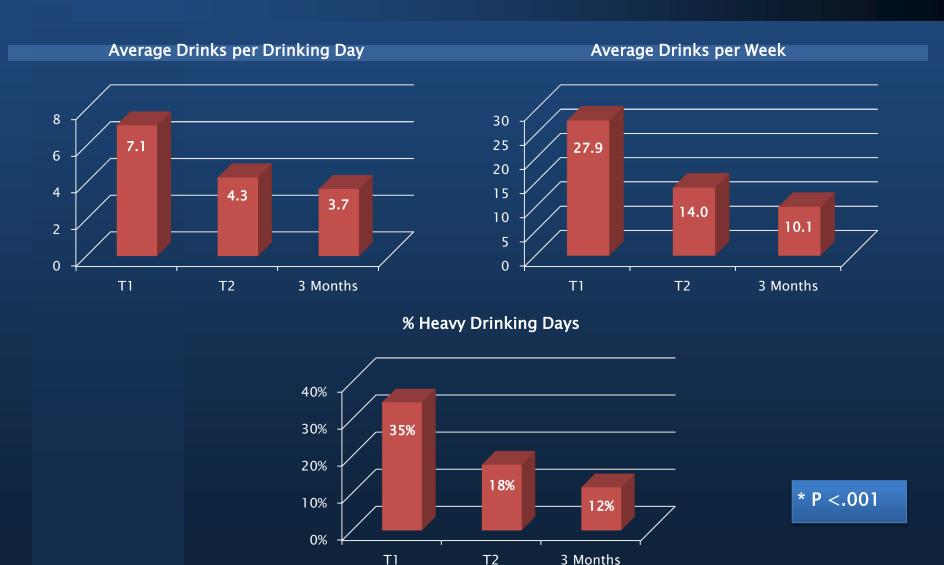


\*p < .001

## PTSD Symptom Change

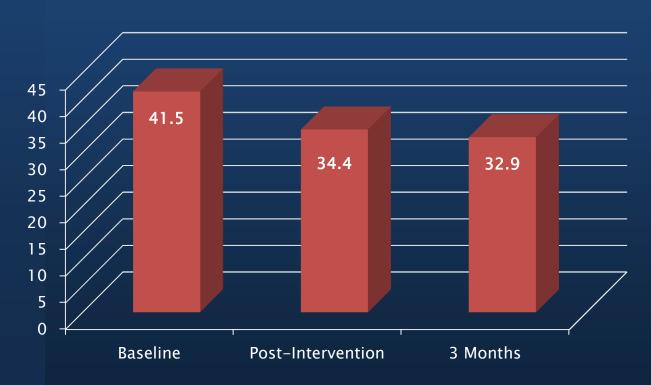


## IIG with 3 Month Follow Up



## PSTD Symptom Changes (IIG)

**PCL-5 Total Scores** 



## **DIG Findings**

- Replication of findings with IIG
- Pre- to post-intervention
  - >DDD, AWD
  - >PTSD Symptoms
- Post-Intervention to 3 months
  - ≻DDD, AWD, % HDD
  - >PTSD Symptoms

## Summary of Findings

- Reached large number of returning Veterans with problem drinking
- Significant changes in two important areas related to war zone exposure
- Gains maintained at 3 months
- Findings internally replicated (DIG)

#### Conclusions

- Important to develop new technologies to reach and intervene with returning Veterans who have post-deployment problems
- Returning Veterans will use Internet based interventions on their own to work on postdeployment recovery
- If empirically based self-management Web interventions are made available to all Veterans should help to reduce impact of war zone exposure

## Questions (deborah.brief@va.gov)

